<u>IN THE CLAIMS</u>:

Please amend Claims 1, 19, 20, 28, 47, 48, and 52-55 as follows.

1. (Currently Amended) A control apparatus connectable to a processor-controlled machine and to a speech processing apparatus to provide an interface between the processor-controlled machine and the speech processing apparatus for enabling a user to control by spoken commands a function of the processor-controlled machine, the control apparatus comprising:

<u>detecting means for detecting the processor-controlled machine;</u>

<u>output means for outputting a welcome message in a case where the detecting means detects the processor-controlled machine;</u>

<u>recognition grammar information receiving means for receiving recognition grammar information from the processor-controlled machine in a case where the detecting means detects the processor-controlled machine;</u>

<u>machine dialog interpretable instruction</u> receiving means for receiving machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus <u>using the recognition grammar information</u>;

device interface means for communicating with the processor-controlled machine to receive from the processor-controlled machine function information identifying the functions available on that processor-controlled machine and machine dialog information identifying a machine dialog compatible with the processor-controlled machine for enabling the control apparatus to cause the processor-controlled machine to carry out at least one of the available functions;

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dialog determining means for determining from the machine dialog information provided by the processor-controlled machine, the machine dialog to be used by the control apparatus for communicating with that processor-controlled machine;

dialog interpreting means for interpreting received machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the determined machine dialog to produce interpreted instructions;

function availability determining means for determining from the function information received by the device interface means whether or not the processor-controlled machine is capable of carrying out a function represented by the interpreted instructions;

machine communication means for communicating with the processor-controlled machine using the determined machine dialog on the basis of the interpreted instructions, so enabling communication of information relating to the carrying out of a function by the processor-controlled machine between the processor-controlled machine and the control apparatus in the event that the function availability determining means determines that the processor-controlled machine is capable of carrying out that function; and

user communication means for enabling communication with the user on the basis of at least one of the interpreted instructions, information provided by the function availability determining means, and information provided by the machine communication means, thereby enabling the user to conduct a spoken dialog with the processor-controlled machine via the speech processing apparatus and the control apparatus to instruct the carrying out of a function by the processor-controlled machine.

2. (Previously Presented) A control apparatus according to claim 1, wherein the control apparatus is connectable to a network and the dialog determining means is arranged to determine the location on the network of the determined machine dialog.

3. (Previously Presented) A control apparatus according to claim 1, further comprising storing means for causing the determined machine dialog to be stored in a dialog store of the control apparatus.

4-5. (Cancelled)

6. (Previously Presented) A control apparatus according to claim 49, wherein the control apparatus is connectable to a network and the dialog identifying means is arranged to determine from the device class the location on the network of the machine dialog for that processor-controlled machine.

7. (Previously Presented) A control apparatus according to claim 49, further comprising storing means for causing the determined machine dialog to be stored in a dialog store of the control apparatus.

8-9. (Cancelled)

10. (Previously Presented) A control apparatus according to claim 49, having a job listener registering means for registering a job listener to receive from the processor-controlled machine information relating to events occurring at the machine.

11. (Previously Presented) A control apparatus according to claim 1, wherein a machine dialog has a number of machine dialog states and the machine communication means is arranged to control the machine dialog state in accordance with the received machine dialog interpretable instructions.

12. (Previously Presented) A control apparatus according to claim 1, wherein the machine communication means is arranged to supply to the speech processing apparatus information relating to speech recognition grammar to be used for processing speech data in accordance with a machine dialog state.

13. (Previously Presented) A control apparatus according to claim 1, further comprising audio data receiving means for receiving speech data and audio data transmitting means for transmitting received speech data to the speech processing apparatus.

14. (Previously Presented) A control apparatus according to claim 1, comprising network interface means for communicating with the speech processing apparatus over a network.

15. (Previously Presented) A control apparatus according to claim 1, comprising

network interface means for communicating with a processor-controlled machine over a network.

16. (Previously Presented) A control apparatus according to claim 1, comprising remote communication means for communicating with at least one of the speech processing apparatus and a processor-controlled machine.

17. (Original) A control device comprising a control apparatus according to claim 1 and an audio input device.

18. (Previously Presented) A voice-control controller comprising a control apparatus in accordance with claim 1 and speech processing apparatus comprising:

speech recognising means for recognising speech in received audio data using at least one speech recognition grammar;

speech interpreting means for interpreting recognised speech to provide machine dialog interpretable instructions; and

transmitting means for transmitting the dialog interpretable instructions to the machine communication means.

19. (Currently Amended) A processor-controlled machine ~~arranged to be~~ connected to a control apparatus in accordance with claim 1, wherein the processor-controlled machine comprises:

machine control circuitry for carrying out at least one function;

storing means storing information relating to a device class defining a machine

dialog to be used by the control apparatus with the processor-controlled machine and functions

available on the machine;

a processor for controlling the machine control circuitry; and

means for providing the machine function information and the machine dialog

information to the control apparatus for enabling the dialog determining means to determine the

machine dialog to be used by the control apparatus with the processor-controlled machine.

20. (Currently Amended) A processor-controlled machine ~~arranged to be~~

connected to a control apparatus in accordance with claim 49, wherein the processor-controlled

machine ~~comprises;~~ <u>comprises:</u>

machine control circuitry for carrying out at least one function;

storing means storing a device class for the processor-controlled machine, the

device class defining a machine dialog to be used by the control apparatus with the processor-

controlled machine and functions available on the machine;

a processor for controlling the machine control circuitry; and

means for supplying the device class to the control apparatus.

21. (Original) A processor-controlled machine according to claim 19, capable of

providing at least one of photocopying, facsimile and printing functions.

22. (Previously Presented) A processor-controlled machine according to claim

19, comprising at least one of:

a television receiver, a video cassette recorder, a microwave oven, a digital

camera, a printer, a photocopier, a facsimile machine, a lighting system, a heating system.

23. (Previously Presented) A device connectable to a network comprising a processor-controlled machine in accordance with claim 19.

24. (Cancelled)

25. (Original) A device according to claim 23, comprising a separate audio input device.

26. (Previously Presented) A system comprising a plurality of devices in accordance with claim 23, and a speech processing apparatus connectable to the devices via a network, said system comprising:

    means for receiving audio data representing speech by a user;

    speech recognition means for recognising speech in the received audio data;

    speech interpreting means for interpreting the recognised speech to provide machine dialog interpretable instructions; and

    transmitting means for transmitting the machine dialog interpretable instructions over the network to at least one of said devices.

27. (Original) A system according to claim 26, further comprising a look-up service connectable to the network.

28. (Currently Amended) A method of enabling a user to control by spoken commands a function of a processor-controlled machine connectable to a speech processing apparatus, the method comprising a control apparatus connected to the processor-controlled machine and to the speech processing apparatus providing an interface between the processor-controlled machine and the speech processing apparatus by carrying out the steps of:

detecting the processor-controlled machine;

outputting a welcome message in a case where the processor-controlled machine is detected;

receiving recognition grammar information from the processor-controlled machine in a case where the processor-controlled machine is detected;

receiving machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the recognition grammar information;

communicating with the processor-controlled machine to receive from the processor-controlled machine function information defining functions available on the processor-controlled machine and machine dialog information defining a machine dialog compatible with the processor-controlled machine for enabling the control apparatus to cause the processor-controlled machine to carry out at least one of the available functions in accordance with a spoken command;

determining from the dialog information provided by the processor-controlled machine a machine dialog to be used by the control apparatus for communicating with the processor-controlled machine;

interpreting received machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the determined machine dialog

to produce interpreted instructions;

determining from the received function information whether or not the processor-controlled machine is capable of carrying out a function represented by the interpreted instructions;

in the event that the processor-controlled machine is determined from the function information to be capable of carrying out that function, communicating with the processor-controlled machine using the determined machine dialog on the basis of the interpreted instructions, so enabling communication of information relating to the carrying out of a function by the processor-controlled machine and the control apparatus; and

enabling communication with the user on the basis of at least one of the interpreted instructions, whether or not the processor-controlled machine is determined from the function information to be capable of carrying out the function and information provided by communication with the processor-controlled machine, thereby enabling the user to conduct a spoken dialog with the processor-controlled machine via the speech processing apparatus and the control apparatus to instruct the carrying out of a function by the processor-controlled machine.

29. (Previously Presented) A method according to claim 28, further comprising the steps of determining the location on a network of a file for the machine dialog.

30. (Previously Presented) A method according to claim 28, further comprising storing the machine dialog in a dialog store of the control apparatus.

31-32. (Cancelled)

33. (Previously Presented) A method according to claim 51, wherein the determining step comprises determining from the device class the location on a network of a file for the machine dialog for that processor-controlled machine.

34. (Previously Presented) A method according to claim 51, further comprising storing the machine dialog in a dialog store of the control apparatus.

35. (Cancelled)

36. (Previously Presented) A method according to claim 28, wherein the determined machine dialog has a number of machine dialog states and the machine dialog state is controlled in accordance with the received machine dialog interpretable instructions.

37. (Previously Presented) A method according to claim 28, wherein information relating to speech recognition grammar to be used for processing speech data is supplied to the speech processing apparatus in accordance with a machine dialog state.

38. (Previously Presented) A method according to claim 28, further comprising the step of receiving speech data and transmitting received speech data to the speech processing apparatus.

39. (Previously Presented) A method according to claim 28, further comprising the step of communicating with the speech processing apparatus over a network.

40. (Previously Presented) A method according to claim 28, further comprising the step of communicating with a processor-controlled machine over a network.

41. (Previously Presented) A method according to claim 28, further comprising the step of communicating via a remote communication link with at least one of the speech processing apparatus and a processor-controlled machine.

42. (Cancelled)

43. (Previously Presented) A computer program product comprising processor implementable instructions for configuring a processor to provide a control apparatus in accordance with claim 1.

44. (Original) A computer program product comprising processor implementable instructions for configuring a processor to carry out a method in accordance with claim 28.

45. (Previously Presented) A signal comprising processor implementable instructions for configuring a processor to carry out a method in accordance with claim 28.

46. (Original) A storage medium carrying a computer program product in accordance with claim 44.

47. (Currently Amended) A computer program product comprising processor implementable instructions for configuring a processor to carry out a method in accordance with ~~claim 32~~ claim 54.

48. (Currently Amended) A computer program product comprising processor implementable instructions for configuring a processor to carry out a method in accordance with ~~claim 42~~ claim 55.

49. (Previously Presented) A control apparatus according to claim 1, wherein the device interface means is arranged to receive information from the processor-controlled machine relating to a device class of the processor-controlled machine that provides the machine dialog information and the function information, the dialog determining means is arranged to determine from the device class the machine dialog to be used by the control apparatus with the processor-controlled machine, and the function availability determining means is arranged to use a JAVA reflection API to determine the function information from the device class.

50. (Previously Presented) A control apparatus according to claim 1, wherein the device interface means is arranged to receive the machine dialog information and the function information from the processor-controlled machine in the form of information identifying or representing a device class for the processor-controlled machine, and the function availability determining means is arranged to use a JAVA reflection API to determine from the device class the function information regarding the functions available on that processor-controlled machine.

51. (Previously Presented) A method according to claim 28, wherein the receiving step receives the machine dialog and function information from the processor-controlled machine in the form of information relating to or representing a device class of the processor-controlled machine;

the determining step determines from the device class the dialog to be used with that processor-controlled machine; and

the function availability step uses a JAVA reflection API to determine from the device class information regarding the functions available on that processor-controlled machine.

52. (Currently Amended) A control apparatus connectable to a processor-controlled machine and to a speech processing apparatus so that the control apparatus provides an interface between the processor-controlled machine and the speech processing apparatus for enabling a user to control by spoken commands a function of the processor-controlled machine, the control apparatus comprising:

a detector operable to detect the processor-controlled machine;

an output device operable to output a welcome message in a case where the detector detects the processor-controlled machine;

a recognition grammar information receiver operable to receive recognition grammar information from the processor-controlled machine in a case where the detector detects the processor-controlled machine;

a receiver operable to receive machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the recognition grammar information;

a device interface operable to communicate with the processor-controlled machine to receive from the processor-controlled machine function information defining the functions available on that processor-controlled machine and machine dialog information defining a machine dialog compatible with the processor-controlled machine to enable the control apparatus to cause the processor-controlled machine to carry out at least one of the functions defined by the function information as being available on that machine;

a dialog determiner operable to determine from the machine dialog information provided by the processor-controlled machine the machine dialog to be used by the control apparatus for communicating with that processor-controlled machine;

a dialog interpreter operable to interpret received machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the determined machine dialog to produce interpreted instructions;

a function availability determiner operable to determine from the function information received by the device interface means whether or not the processor-controlled machine is capable of carrying out a function represented by the interpreted instructions;

a machine communicator operable to communicate with the processor-controlled machine using the determined machine dialog on the basis of the interpreted instructions, so enabling communication of information relating to the carrying out of a function by the processor-controlled machine between the processor-controlled machine and the control apparatus in the event that the function availability determiner determines that the processor-controlled machine is capable of carrying out that function; and

a user communicator operable to enable communication with the user on the basis of at least one of the interpreted instructions, information provided by the function determiner,

and information provided by the machine communicator, thereby enabling the user to conduct a spoken dialog with the processor-controlled machine via the speech processing apparatus and the control apparatus to instruct the carrying out of a function by the processor-controlled machine without the necessity of having to have prior knowledge of the spoken dialog commands available to the user.

53. (Currently Amended) A control apparatus connectable directly to a network device and connectable over a network to a speech processing apparatus so that the network device has a location on the network and the control apparatus provides an interface between the network device and the speech processing apparatus for enabling a user to control by spoken commands at least one function of the network device, the control apparatus comprising:

a detector operable to detect the network device;

an output device operable to output a welcome message in a case where the detector detects the network device;

a recognition grammar information receiver operable to receive recognition grammar information from the network device in a case where the detector detects the network device;

a receiver operable to receive machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the recognition grammar information;

a device interface operable to communicate with the network device to receive from the network device dialog information identifying a location on the network, different from

the network device's network location, of a machine dialog compatible with the network device to enable the control apparatus to cause the network device to carry out the at least one function;

a machine dialog accessor operable to access the machine dialog at the location on the network identified by the machine dialog information;

a dialog interpreter operable to interpret received machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the accessed machine dialog to produce interpreted instructions;

a machine communicator operable to communicate with the network device using the accessed machine dialog on the basis of the interpreted instructions, so enabling communication of information relating to the carrying out of the at least one function by the network device between the network device and the control apparatus; and

a user communicator operable to enable communication with the user on the basis of at least one of the interpreted instructions, and information provided by the machine communicator, thereby enabling the user to conduct a spoken dialog with the network device via the speech processing apparatus and the control apparatus to instruct the carrying out of the at least one function by the network device.

54. (Currently Amended) A method of enabling a user to control by spoken commands at least one function of a processor-controlled machine connected to a control apparatus which is connected over a network to a speech processing apparatus so that the control apparatus provides an interface between the processor-controlled machine and the speech processing apparatus, the method comprising the control apparatus carrying out the steps of:

detecting the processor-controlled machine;

outputting a welcome message in a case where the processor-controlled machine

is detected;

receiving recognition grammar information from the processor-controlled

machine in a case where the processor-controlled machine is detected;

receiving machine dialog interpretable instructions derived from speech data

processed by the speech processing apparatus using the recognition grammar information;

communicating with the processor-controlled machine to receive from the

processor-controlled machine function information defining the functions available on that

processor-controlled machine and machine dialog information defining a machine dialog

compatible with the processor-controlled machine for enabling the control apparatus to cause the

processor-controlled machine to carry out at least one of the functions defined by the function

information as being available on that machine;

determining from the machine dialog information provided by the processor-

controlled machine the machine dialog to be used by the control apparatus for communicating

with the processor-controlled machine;

interpreting received dialog interpretable instructions derived from speech data

processed by the speech processing apparatus using the determined machine dialog to produce

interpreted instructions;

determining from the received function information whether or not the processor-

controlled machine is capable of carrying out a function represented by the interpreted

instructions;

communicating with the processor-controlled machine using the determined

machine dialog on the basis of the interpreted instructions, so enabling communication of

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information relating to the carrying out of a function by the processor-controlled machine between the processor-controlled machine and the control apparatus if the processor-controlled machine is determined to be capable of carrying out that function; and

enabling communication with the user on the basis of at least one of the interpreted instructions, the determined function information, and information provided by communication with the processor-controlled machine, thereby enabling the user to conduct a spoken dialog with the processor-controlled machine via the speech processing apparatus and the control apparatus to instruct the carrying out of a function by the processor-controlled machine without the necessity of having to have prior knowledge of the spoken dialog commands available to the user.

55. (Currently Amended) A method of enabling a user to control by spoken commands at least one function of a network device connected to a control apparatus which is connected over a network to a speech processing apparatus so that the network device has a location on the network and the control apparatus provides an interface between the network device and the speech processing apparatus, the method comprising the control apparatus carrying out the steps of:

detecting the network device;

outputting a welcome message in a case where the network device is detected;

receiving recognition grammar information from the network device in a case where the network device is detected;

receiving machine dialog interpretable instructions derived from speech data processed by the speech processing apparatus using the recognition grammar information;

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communicating with the network device to receive from the network device

machine dialog information identifying a location on a network of a machine dialog compatible

with the network device for enabling the control apparatus to cause the network device to carry

out the at least one function;

accessing the machine dialog at the location on the network, different from the

network device's network location, identified by the machine dialog information;

interpreting received machine dialog interpretable instructions derived from

speech data processed by the speech processing apparatus using the accessed machine dialog to

produce interpreted instructions;

communicating with the network device using the accessed machine dialog on the

basis of the interpreted instructions, so enabling communication of information relating to the

carrying out of the at least one function by the network device between the network device and

the control apparatus; and

enabling communication with the user on the basis of at least one of the

interpreted instructions and information provided by communication with the network device,

thereby enabling the user to conduct a spoken dialog with the network device via the speech

processing apparatus and the control apparatus to instruct the carrying out of the at least one

function by the network device.